

**Notice of Allowability**

Application No.

10/748,550

Examiner

Brenda Pham

Applicant(s)

FENG ET AL.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/10/07.
2. ☒ The allowed claim(s) is/are 20-31, renumbering as 1-12, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

BRENDA PHAM  
PRIMARY EXAMINER

*Brenda A. Pham* 12/13/07

### REASONS FOR ALLOWANCE

1. Claims 20-31 allowed.

2. The following is an examiner's statement of reasons for allowance: the prior arts made of record fail to teach a time-domain frame structure having a plurality of OFDM symbols, wherein at least one of said OFDM symbols has a guard interval and a periodic signal pattern for detecting frame timing and code identification, and at least one of said OFDM symbols comprises cell code information in a common pilot channel (CPICH) signal of a cell code.

The prior arts further fail to teach a time-domain frame structure having a plurality of OFDM symbols each including a guard interval and a signal pattern, wherein a portion of the signal pattern of one of said OFDM symbols is identical to a portion of the signal pattern of at least another of said OFDM symbols with the identical portions of the signal patterns forming a periodic pattern, and at least one of said OFDM symbols comprises cell code information in a common pilot channel (CPICH) signal of a cell code for detecting frame timing and code identification.

The prior arts made of record fail to teach a time-domain frame structure having a plurality of OFDM symbols each including a regular guard interval and a signal pattern, and at least two consecutive OFDM symbols having a common guard interval followed by two identical signal patterns with said common guard interval having a length equal to the length of two regular guard intervals, wherein at least one of said

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OFDM symbols comprises cell code information in a common pilot channel (CPICH) signal of a cell code for detecting frame timing and code identification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Wu et al (US 2005/0063345 A1) disclose system and method for embedding OFDM in CDMA systems.

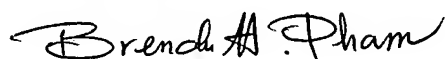
Kim et al (US 2003/0193970 A1) disclose device and method for symbol frame synchronization of OFDM transmitter and receiver.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

December 13, 2007  
Brenda Pham



**BRENDA PHAM**  
**PRIMARY EXAMINER**